EXPLANATION (Long Creek Quadrangle)

Qa Alluvium Recent QUATERNARY Landslide Letter symbol below line indicates formation principally involved Pleistocene Q+ Terrace deposits Gravels, sands, and clays in northern part of Fox basin UNCONFORMITY Tm Mascall Formation Mostly waterlaid ash and tuff of ash-flow origin, with thin beds of small-pebble gravel, Columbia River Group Middle and Upper Miocene but includes some boulder gravels along south edge of Fox basin. Lower beds interfinger with upper flows of Picture Gorge Basalt Tp. Picture Gorge Basalt Hornblende dacite Plug north of East Fork of Beech Creek Medium to dark gray basalt flows commonly containing a little olivine Upper flows interfinger with Mascall Formation along west side of Fox basin Upper Oligocene and Lower Miocene UNCONFORMITY Tjd John Day Formation Weathered waterlaid ash exposed in road cuts at northwest corner of quadrangle UNCONFORMITY Tcl Clarno Formation Volcanic flows and breccias ranging in composition from basalt to rhyolite UNCONFORMITY Permian? Paleozoic rocks Black shale, greenstone, and gabbro exposed only in open cuts at Black Butte mine Contact Dashed where approximately located Fault Dashed where approximately located, dotted where concealed. Bar and ball on downthrown side

> Lineament from aerial photographs Indicating fault or fracture zone

*

Plunging syncline Showing trough line of fold

Strike and dip of beds or lava flows

Horizontal beds or lava flows

U.S. Geological Survey

OPEN FILE MAP

This map is preliminary and has
not been edited or reviewed for
conformity with Geological Survey,
standards or nomenclature.



